CLAIMS

What is claimed is:

1   1.   A memory device comprising:

2   a main flash array; and

3   a hidden storage area connected to the main flash array, wherein the

4   hidden storage area can not be accessed without a valid password.

1   2.   The memory device of claim 1, wherein the hidden storage:

2   area comprises one or more hidden storage memory banks.

1   3.   The memory device of claim 2, wherein the hidden storage memory banks

2   are divided into one or more user spaces and a password space.

1   4.   The memory device of claim 3, wherein the valid password allows

2   accesses to only one of the user spaces.

1   5.   The memory device of claim 2, wherein the hidden storage memory banks

2   include a swap space to copy data between the hidden storage memory

3   banks.

1   6.   The memory device of claim 2, wherein the hidden storage area further

2   comprises a bank selector to select a hidden storage memory bank.

1   7.   The memory device of claim 2, wherein the hidden storage area further

2   comprises an output bus gate to prevent access to the hidden storage

3   memory banks.

1   8.   The memory device of claim 7, wherein the hidden storage area further

2   comprises an address decoder to open the output bus gate when

3   provided the valid password and a valid memory address within the

4   hidden storage memory banks.

1   9.   The memory device of claim 8, wherein the valid memory

2   address is provided by a host.

1   10.   The memory device of claim 7, wherein the hidden storage area further

2   comprises a valid password register to indicate a password has been

3   verified by an internal processor.

1   11.   The memory device of claim 10, wherein the hidden storage area further

2   comprises a bad password counter, to count the number of times the

3   internal process is unable to verify the password.

1   12.   A method, comprising:

2   storing one or more valid passwords in a hidden storage memory bank;

3   writing a password from a host into the hidden storage memory bank; and

4   verifying the validity of the written password against the valid stored

5   passwords.

1   13.   The method of claim 12, further comprising permitting access to read from

2   the hidden storage memory bank if the password is verified.

1   14.   The method of claim 13, further comprising permitting access to write to

2   the hidden storage memory bank if the password is verified; and a valid

3   address in the hidden storage memory bank is provided.

1   15.   The method of claim 12, further comprising dividing the hidden storage

2   memory block into one or more user spaces, a password space, and a

3   swap space.

1   16.   The method of claim 12, further comprising writing a recovery password

2   that allows a bad password counter to be reset.

1   17.   The method of claim 12, further comprising writing a system administrator

2   password that allows the hidden storage memory bank, a recovery

3   password, and a bad password counter to be reset.

4   18.   A computer readable medium having stored thereon a plurality of

5   instructions, said plurality of instructions when executed by a computer, cause

6   said computer to perform:

7   storing one or more valid passwords in a hidden storage memory bank;

8   writing a password from a host into the hidden storage memory bank; and

9   verifying the validity of the written password against the valid stored

10   passwords.

1   19.   The computer-readable medium of claim 18 having stored thereon

2   additional instructions, said additional instructions when executed by a

3   computer, cause said computer to further perform permitting access to

4   read from the hidden storage memory bank if the password is verified.

1   20.   The computer-readable medium of claim 19 having stored thereon

2   additional instructions, said additional instructions when executed by a

3   computer, cause said computer to further perform permitting access to

4   write to the hidden storage memory bank if the password is verified; and a

5   valid address in the hidden storage memory bank is provided.

1   21.   The computer-readable medium of claim 18 having stored thereon

2   additional instructions, said additional instructions when executed by a

3   computer, cause said computer to further perform dividing the hidden

4   storage memory block into one or more user spaces, a password space,

5   and a swap space.

1   22.   The computer-readable medium of claim 18 having stored thereon

2   additional instructions, said additional instructions when executed by a

3   computer, cause said computer to further perform writing a recovery

4   password that allows a bad password counter to be reset.

1   23.   The computer-readable medium of claim 18 having stored thereon

2   additional instructions, said additional instructions when executed by a

3   computer, cause said computer to further perform writing a system

4   administrator password that allows the hidden storage memory bank, a

5   recovery password, and a bad password counter to be reset.